

REQUEST FOR NEW COURSE

1. General Information.					
a.	Submitted by the College of: Pharmacy	Today's Date:	11/23/09		
b.	Department/Division: Pharmaceutical Sciences				
c.	Contact person name: Catina Rossoll	Email: cross2@uky.edu	Phone:	257.1998	
d.	Requested Effective Date:	<input checked="" type="checkbox"/> Semester following approval	OR	<input type="checkbox"/> Specific Term/Year ¹ : _____	
2. Designation and Description of Proposed Course.					
a.	Prefix and Number:	PHS 750			
b.	Full Title:	Pharmaceutical Sciences Journal Clubs			
c.	Transcript Title (if full title is more than 40 characters):	N/A			
d.	To be Cross-Listed ² with (Prefix and Number):	N/A			
e.	Courses must be described by <u>at least one</u> of the meeting patterns below. Include number of actual contact hours ³ for each meeting pattern type.				
	_____ Lecture	_____ Laboratory ¹	_____ Recitation	1 Discussion	
	_____ Clinical	_____ Colloquium	_____ Practicum	_____ Research	
	_____ Seminar	_____ Studio	_____ Other – Please explain: _____		
f.	Identify a grading system:	<input checked="" type="checkbox"/> Letter (A, B, C, etc.)	<input type="checkbox"/> Pass/Fail		
g.	Number of credits:	1			
h.	Is this course repeatable for additional credit?			YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
	If YES:	Maximum number of credit hours:	5		
	If YES:	Will this course allow multiple registrations during the same semester?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
i.	Course Description for Bulletin:	Discussion and presentations of foundation or current literature and emerging topics in pharmaceutical sciences. Topics vary by section.			
j.	Prerequisites, if any:	consent of instructor			
k.	Will this course also be offered through Distance Learning?			YES ⁴ <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
l.	Supplementary teaching component, if any:	<input type="checkbox"/> Community-Based Experience	<input type="checkbox"/> Service Learning	<input type="checkbox"/> Both	
3.	Will this course be taught off campus?			YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
4. Frequency of Course Offering.					
a.	Course will be offered (check all that apply):				
	<input checked="" type="checkbox"/> Fall	<input checked="" type="checkbox"/> Spring	<input type="checkbox"/> Summer		
b.	Will the course be offered every year?			YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

¹ Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

² The chair of the cross-listing department must sign off on the Signature Routing Log.

³ In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, represents at least two hours per week for a semester for one credit hour. (from SR 5.2.1)

⁴ You must *also* submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.

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	If NO, explain: _____	
5.	Are facilities and personnel necessary for the proposed new course available?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
	If NO, explain: _____	
6.	What enrollment (per section per semester) may reasonably be expected?	8-10 students for each section
7.	Anticipated Student Demand.	
a.	Will this course serve students primarily within the degree program?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
b.	Will it be of interest to a significant number of students outside the degree pgm?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	If YES, explain: _____	
8.	Check the category most applicable to this course:	
	<input checked="" type="checkbox"/> Traditional – Offered in Corresponding Departments at Universities Elsewhere	
	<input type="checkbox"/> Relatively New – Now Being Widely Established	
	<input type="checkbox"/> Not Yet Found in Many (or Any) Other Universities	
9.	Course Relationship to Program(s).	
a.	Is this course part of a proposed new program?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	If YES, name the proposed new program: _____	
b.	Will this course be a new requirement ⁵ for ANY program?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	If YES ⁵ , list affected programs: _____	
10.	Information to be Placed on Syllabus.	
a.	Is the course 400G or 500?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	If YES, the <i>differentiation for undergraduate and graduate students must be included</i> in the information required in 10.b . You must include: (i) identification of additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR 3.1.4.)	
b.	<input checked="" type="checkbox"/> The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached.	

⁵ In order to change a program, a program change form must also be submitted.

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Signature Routing Log

General Information:

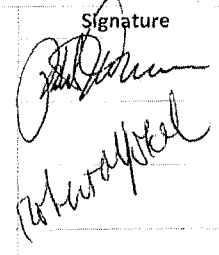
Course Prefix and Number: PHS 750

Proposal Contact Person Name: Catina Rosoll Phone: 257.1998 Email: cross2@email.uky.edu

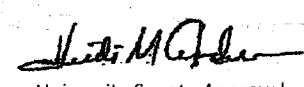
INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
Department Faculty	11-24-09	Patrick McNamara / 257.8656 / pmcnamar@email.uky.edu	
Graduate Program Committee	10-29-09	Robert Yokel / 257.4855 / ryokel@email.uky.edu	
Graduate Program Faculty	11-23-09	Robert Yokel / 257.4855 / ryokel@email.uky.edu	
		/ /	
		/ /	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ⁶
Undergraduate Council			
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

⁶ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

PHS 750 Cardiovascular Journal Club
Fall 2010 COURSE SYLLABUS
8:00 – 8:50 am Tuesdays, Rm. 523 CT Wethington Building
8:00 – 8:50am Fridays, Rm. 234 Biological Pharmaceutical Complex (BPC)

General:

PHS 760-005 is a 1 credit hour course for graduate students whose research is in the broad area of cardiometabolic disease. In addition to students enrolled in the class, graduate students, fellows, faculty and staff regularly attend. Graduate Students and Fellows funded by the Cardiovascular Training Grant, Nutritional Sciences Training Grant or by American Heart Fellowships are expected to attend.

The course meets twice weekly. Students are expected to attend and participate in the Cardiovascular Seminar held Friday mornings. Secondly, a recently published manuscript is the central focus of a discussion held on Tuesday Mornings. The discussion is led by students and fellows who select topics in consult with their mentors. Once selected, manuscripts are submitted to Casie Stevens (cltrim2@email.uky.edu) and posted on the Cardiovascular Research Center web site (<http://www.mc.uky.edu/cvrc/seminars/>).

Presenting students are expected to initiate the discussion by providing background and context for the research report as well as guide the group through a critical evaluation of the methods, analyses, results and conclusions. Non-presenting students are expected to have read the manuscript prior to class and actively participate in the discussion. Grades for enrolled students will be assigned based the quality of their presentation and participation throughout the semester. Office hours for all participating faculty are available by appointment.

Course coordinator:

Dr. Gregory Graf
434 College of Pharmacy
257-4749
email: gagraf2@email.uky.edu

Other Instructors:

Cardiovascular Research Center Faculty
<http://www.mc.uky.edu/cvrc/faculty/>
Graduate Center for Nutritional Sciences Faculty
<http://www.mc.uky.edu/nutrisci/faculty.html>

Course Objectives:

- Review recent literature in the area of cardiometabolic disease
- Understand the scientific context and rationale for a given study
- Develop critical thinking skills requisite for evaluation of a research report
- Lead and engage in a constructive scientific discussion

On-line Course Evaluation Policy:

Regular course and instructor evaluations are required by state, university, college and accreditation regulations. These evaluations are essential for improving student learning by providing feedback to faculty. Please note that your individual responses are completely **anonymous**. Summary reports of aggregate data will be provided to the faculty after the semester is completed.

The College of Pharmacy administers these evaluations electronically through a web-based program. You will receive email notifications from the Office of Education about when to complete a course and/or an instructor evaluation(s) for this course. Since these evaluations are completed electronically and each survey will be posted only for a limited time, you should check your university email account regularly.

PHS 750 Neuropharmacology Journal Club

Course Director:

Andrew M. Smith, Ph.D.

Office: BBSRB B347; 257-1891

andrewsmith@uky.edu

available by appointment

Course Requirements: Attendance, **participation** and 1 paper presentation

Grading: Presentation, participation and if you have 2 or more unexcused absences, your grade will reflect it. Excused absences are defined in the University Senate Rules.

Journal club (From Wikipedia, the free encyclopedia)

*A journal club is a group of individuals who meet **regularly to critically evaluate recent articles in scientific literature**. Journal clubs are usually organized around a defined subject in basic or applied research. Typically, each participant **can voice their view relating to several questions such as the appropriateness of the research design, the statistics employed, the appropriateness of the controls that were used, etc.** There might be an attempt to synthesize together the results of several papers, even if some of these results might first appear to contradict each other. Even if the results of the study are seen as valid, there might be a discussion of **how useful the results are and if these results might lead to new research or to new applications**.*

Article Requirements: The paper should be a full-length research paper (not a review) from 2008 or later. Anything having to do with pharmacology in the nervous system is acceptable (e.g. drugs of abuse, drug action or drug mechanism on brain or neurobehavioral measures). Choose your article at least 2 weeks before you present so that I can approve and distribute the article. I will distribute the article 1 week before your presentation.

1. How to choose a paper (suggested). I will review all papers for appropriateness before sending them out to the journal club.

- Choose something relevant to your interests, your current or future lab rotations, or your dissertation direction.
- Choose something where you understand and/or have hands on experience in the methods.
- Choose something you can critique. This is all about critique.

If you are having trouble finding an article, talk to your rotation supervisor, your PI or me. I keep a list of articles for journal club and can send you 2-3 to consider.

2. How to read a paper critically.

The basic questions you need to address in your presentation (keep in mind while reading):

- a. What questions does the paper address?
- b. What is the main hypothesis?
- c. How do they propose to test the hypothesis (what are the methods)?
- d. Are the methods appropriate? Performed correctly? Good controls?
- e. What are the main conclusions of the paper?

- f. What evidence supports those conclusions?
- g. Do the data actually support the conclusions?
- h. What is the quality of the evidence?
- i. Why are the conclusions important?
- j. How do these data contribute to the knowledge in the field?

3. How to give the presentation.

There are distinct sections that should be included for presentation. They do not have to be in this order, you can incorporate your comments throughout the presentation or save them until the end or do a little of both.

- a. Why you chose this paper.**
- b. Background** of the problem, disease state or mechanism in question. Give a mini neuroscience primer. You will need to use additional resources such as textbooks and review articles to help fill in this detail. Google images helps too.
- c. Methods.** Subjects, technique used and experimental design. No need to go into a long discussion of the technique unless you are using all of that detail to make a point in the results. It is OK to say “they ran a Western Blot.”
- d. Results.** Present each figure and table in the paper. You may wish to consider presenting each method before its appropriate result or present all methods, then all results, your choice.
- e. Discussion (theirs).** What was the primary finding and how was it supported by the data? What statements did they make and did their data strongly support it. Do they acknowledge alternative explanations?
- f. Critique or YOUR Discussion.** What did you think?
 - i. Strengths of the article?**
 - ii. Weaknesses of the article?**

Helpful hints:

- use more pictures/diagrams and less words.
- do not read your presentation, talk through it. Your slides should provide you with clues on what you want to say, but don't read each line on your slide.
- practice, practice, practice!

See also: http://www.eecs.berkeley.edu/~messenger/Bad_talk.html

Tips for Critically Reading a Scientific Paper

Edited from:

http://learning.berkeley.edu/es100/Paper_Critique.htm

Introduction - The intro should give sufficient background of the problem and lead in to the hypothesis to be tested. The intro may even summarize the main result. Use the citations in the introduction to help you form your background section in your presentation.

Methods - As a scientist-in-training, it can be difficult to evaluate the methods without having specific experience with that procedure or reading a lot more on the topic than you already know at present. However, as you read through the article, it may become clear that the methods could be better. If possible make a list of specific problems, but do not be so general as to be meaningless. For example "They should have done more work" or "Their analysis was shoddy". You should evaluate specific points, not make vague overall assessments. For example, more work may mean, a greater number of subjects may have improved their variability and resulted in a more definitive answer (clear effect or clear lack of effect). Another characteristic of a good methods section is that the procedures are described in sufficient detail that someone else could repeat the basic study. If you know the method/technique, this will be easy to evaluate. If you do not know the technique well, consider the controls used, the appropriateness of the subjects (or cell lines) used, whether just one method was used or if they back up their findings with alternative or multiple methods or markers (good practice).

Results - Here is where you need to read carefully. Compare the statements in the text with the data in the tables and figures, and generally read with a critical and suspicious attitude. You will have to accept the following on faith: That the data presented were actually observed, not concocted out of the author's head to prove his or her point. However, it sometimes happens that the author makes observations that contradict other data in the same paper or previous/other ones. If so, you will need to decide whether you agree or not. Is the author trying to "explain away" data that don't fit, or has he or she done a good job of showing why the new data are at variance? Have the authors provided statistical support for their statements?

Discussion - Here the authors try to tie it all up, show that they have achieved their purpose, which is to increase our understanding of the general problem posed in the introduction. No matter how small or narrow their purpose may seem to you, the question is, have they achieved it or partially achieved it? If not, why? Could it have been improved given additional experiments or interpretations? Do any alternative explanations of their data strike you as more obvious than theirs? Does anything seem out of place? Perhaps you can tell that a reviewer asked for a specific experiment? Or what's missing? Perhaps some obvious interpretations are lacking?

Overall - What would improve the paper? Additional or different experiments, subjects, interpretations, approach? Is the data really new and interesting or just a regurgitation of the same old thing? Please be sure your suggestions are logical and to the point. Do not suggest measuring all the variables you can think of if these measurements don't help answer the question posed.

Essentially, you need to evaluate the paper on at least three grounds:

1. Are the experiments and observations well done,
2. Do they help to answer the questions that the author says he or she is trying to answer, and
3. Are there alternative explanations for the results that the author has not considered?

The second skill is deciding if these are the most appropriate experiments to prove what the authors want to claim. Is there a better, more direct way to obtain the same conclusion? Can a particular technique be used in a given situation? This is a difficult aspect of critical reading for a young scientists to develop, as they do not necessarily know what caveats are associated with various techniques or what alternative methods could be used to obtain similar results. This skill also includes evaluating whether all of the appropriate controls are included to show that the technique is working as expected.

See also:

<http://www.biochem.arizona.edu/classes/bioc568/papers.htm>

http://helios.hampshire.edu/~apmNS/design/RESOURCES/HOW_READ.html

How to read a scientific article

Laurel S. Collins, Ph.D. Florida International University

Probably what you should learn if you are a graduate student is not a large number of facts, especially if they are in books, but what the important problems are, and to sense which experiments, work that has been done, probably aren't quite right.

-James Watson, of Watson & Crick (DNA fame)

When students in the sciences are first faced with using the primary research literature, the prospect sometimes seems overwhelming. Finding pertinent journal articles often seems to involve a maze of abstracting journals, indifferent librarians, missing volumes, CDroms from hell, and bound periodicals that refuse to flatten themselves for photocopiers (no matter how hard you press on them, CPR-style). Even once an article has been located--or, in the case of this class, provided--there is the problem of reading it. The worst way to assimilate a research paper is to read it word for word, title to literature cited, as if it were a textbook. This approach is a waste of time, because perhaps as few as 1 in 4 articles that find their way into your hands should be committed to your brain, and is deadly boring.

Before reading one word of an article, ask yourself: What am I looking for in this article? Knowing what I do about the subject, what gaps need to be filled, what knowledge needs to be expanded, and what controversial points need to be corroborated? Generate expectations of a journal article before you read it. This will help your analysis of the work in front of you, plus keep you more interested in the material. Then what:

1. Read the authors' names. Where and with whom are they working? What is their expertise? Names may mean little at first, but as you "wade through" a scientific subject or topic you will find familiar names cropping up, and you will develop those with whom you agree and those whom you question.
2. Read and digest the title. It should summarize the work of the article well, help you to clarify your expectations of the paper, and it should be an attention-getter (if you are reading the article, it has probably already accomplished that task!).

3. Read the abstract carefully and try to understand it (though it may be the densest prose you will ever encounter). Abstracts are as difficult to read as they are to write, because an entire publication must be summarized in an understandable way in only about 200 words. By now, you should have a good idea of what the paper is about and what you have gotten yourself into. At this point, it may be obvious that the paper does not answer your questions. If this is true, move on, but be conservative because the authors' interpretation of the research presented in the abstract may not be the same as yours after reading the full paper. Never cite an article after having read only the abstract!
4. Picture time--flip through the article and study the figures, illustrations, and tables, including the legends. It will probably become necessary to consult the Methods and Results section to clarify figures and understand the experimental design. If the article is closely related to your research, closely examine the techniques described in the Methods section. There may be problems there, but more likely there will be a new, perhaps better, approach to your own research. It should be clear to you by now whether this paper will be truly helpful. If so, now it is time to be critical (please, see the note below about this word).
5. Read the Introduction and be sure the author knows the field, has adequately researched past work, and understands where their work "fits into the puzzle". Generally, the Intro and Literature Cited sections go hand-in-hand. Most importantly, within the first paragraph or 2 of the Introduction the authors should have made it very clear what their objectives for the research were, and what their paper will tell you.
6. Check to see if the Results adequately and accurately describe the data presented in the paper. Are there additional points that should have been brought up? Is there something in the figures or tables that does not substantiate the authors' claims that was not mentioned? Do the figures and tables clearly, succinctly, and attractively present the results of the paper? Remember that great data presented clumsily or sloppily will not be seen as great, only clumsy or sloppy.
7. Now read the Discussion. This is perhaps the most important section, because it is here that the results (the "what" of the research) are explained. That is, here is where the authors should [at least try to] explain "why" they saw what they saw. Beware of unsubstantiated speculation, though do not fault, off-hand, the presentation of hypotheses for future work or even expectations of findings from those future experiments. On the other hand, there are authors who are prone to timidity, understatement, or who are just plain invertebrate about their ideas. You should not be left guessing, or left to fumble to your own conclusions because an author was unwilling to take even a small step out onto a limb. As a moderate example of such understated conclusions, Watson and Crick ended their historic presentation of the structure of DNA with the sentence: "It has not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material." In fact, the complimentary base pairing they presented was no less than a quantum leap in our understanding of biological systems, in terms of both modern biochemistry and evolution!

Bear in mind that the ultimate burden of assessing published material lies with you, the reader. Take the time and energy to do this and you will gain more and be further along than the person who depends on the author for interpretation. Having just completed a critical reading and assimilation of a journal article pertinent to your work, you should be able to paraphrase the significance of this paper with 3 or 4 sentences free of technical jargon. You should also be able to both praise and criticize several points of the paper (this is important--see note below). A general rule of thumb, regarding what goes where, when both reading and writing a scientific article is:

Title: Short, succinct, eye-catching, all-encompassing

Abstract: Summary of Methods, Results, and Discussion starting off with a statement of why the research was done and with emphasis on why the results are significant.

Introduction: When was past work done, by whom, why was their work important, what you plan to do in your paper, and why what you did is important.

Materials and Methods: How you did what you did and where you did it--nothing more.

Results: What the data show you--nothing more.

Discussion: Why the data show what they show, and how your analysis relates back to your objectives from the Introduction.

Note: Some journals will allow the Results and Discussion sections to be combined. In this case, the data should be divided up into logical groups, and for each group (generally separated by a subheading) the What and the why are presented together.

A note on critiques: A critique "considers the merits and demerits of something and judges accordingly" (Webster). When critiquing an article (or anything, really), remember that there are positive points to be found, and made, about everything. To present only negative criticism is wrong. Never forget to acknowledge that, while we all make mistakes and do things incorrectly, we also all do things correctly sometimes. A pat on the back can go a long way.

Academic Honesty/ Penalties

Academic honesty is the cornerstone upon which scientific research and scholarship are based. Experimental discoveries and new scientific insights are built upon a foundation formed by the work and thoughts of others. Thus, utilizing such thoughts in a paper or manuscript, without giving credit to the originator of the idea or result, is dishonest. Such dishonesty is termed *plagiarism*, and is considered an extremely serious offense by the graduate program, the University of Kentucky, and the academic community throughout the world. The penalties for plagiarism are grave, and can range from a zero for an assignment, to an E (failure) in a course, and in grievous instances, suspension, dismissal or expulsion from the graduate program and university. The official university list of definitions (Senate Rule 6.3.1), and penalties (Senate Rule 6.4.3(3)) is available at:

<http://www.uky.edu/USC/New/SenateRulesMain.htm> <<http://www.uky.edu/USC/New/SenateRulesMain.htm>>

In addition, in manuscripts that are submitted for review, scientific journals demand a high standard of honesty and fair credit for previous publications. The journals published by the American Association of Pharmaceutical Scientists have developed an Ethics Policy that covers plagiarism, improper manipulation of images, data fabrication or falsification, and other serious breaches of scientific conduct. This information is available at:

<http://www.aapsj.org/about/AAPS-ethicspolicy-2007.pdf> .

Students should familiarize themselves with what constitutes plagiarism, especially in writing manuscripts for the primary literature and their dissertations. Practices that are accepted in other cultures may be considered serious offenses in the United States.

The University Academic Ombud Office has additional resources at:

<http://www.uky.edu/Ombud/policies.php> <<http://www.uky.edu/Ombud/policies.php>> and a link to an excellent paper, "Plagiarism: What is it?" at <http://www.uky.edu/Ombud/Plagiarism.pdf> <<http://www.uky.edu/Ombud/Plagiarism.pdf>>.

PHS 750 NEUROPHARMACOLOGY JOURNAL CLUB

Spring 2010 Schedule

Thursdays 10:00 – 11:00, BBSRB B413

- 1/21 Dayna Hayes, Ph.D. (Nixon Lab, Pharmaceutical Sciences)
- 1/28 Kiran B. Siripurapu, Ph.D. (Dvoskin Lab, Pharmaceutical Sciences)
- 2/4 Stephanie Morris (Nixon Lab, Pharmaceutical Sciences)
- 2/11 Alex Marshall (Nixon Lab, Pharmaceutical Sciences)
- 2/18 Joseph Lutz (Littleton Lab, Pharmaceutical Sciences)
- 2/25 Josh Beckmann, Ph.D. (Bardo Lab, Psychology)
- 3/4 Levi Bolin (Akins Lab, Psychology)
- 3/11 Jennifer Berry (Prendergast Lab, Psychology)
- 3/18 ***No journal club – SPRING BREAK***
- 3/25 Sucharita Sen (Dvoskin Lab, Pharmaceutical Sciences)
- 4/1 Cassie Gipson (Bardo Lab, Psychology)
- 4/8 Justin McClain, Ph.D. (Nixon Lab, Pharmaceutical Sciences)
- 4/15 Daniel Liput (Nixon Lab, Pharmaceutical Sciences)
- 4/22 Kristen Wellmann (Barron Lab, Psychology)
- 4/29 Karin Shinker (Akins Lab, Psychology)
- 5/6 ***Make up day if necessary***

2010 Spring
PHS 750 – Solid-State Organic Chemistry Literature Review (1 credit)
Coordinator: Tonglei Li, Ph.D.

The aim of this 1-credit course is to expose you to the literature of organic solid materials that are used in drug development and other fine chemical industries. Each student needs to present one or more reviews of papers that you find interesting. You also need to participate in other students' presentations asking questions and sharing your opinions. It is expected that by taking this course for a few semesters, you will build a considerable knowledge base of solid-state organic chemistry and, equally important, you will improve your communication and critical-thinking skills.

Interesting journals include but are not limited to:

Pharm Res, J Pharm Sci, Crystal Growth & Design, JACS, J Crystal Growth, CrystEngComm, Acta Crystallographica, Chemistry of Materials, Angewandte Chemie, Accounts of Chemical Research, Chemical Communications (RSC), Nature, and Science

Semester Theme: Crystal engineering, nanomedicine, and amorphous stability

Schedule:

Date	Name
29 January	Ale
5 February	Christin
12 February	Rongsheng
19 February	Xiaoxi
26 February	Ale
5 March	Christin
12 March	Rongsheng
19 March	Xiaoxi
26 March	Sihui
2 April	Christin
9 April	Ale
16 April	Rongsheng
23 April	Xiaoxi
30 April	Sihui

Grading: attendance and class participation. You should attend all presentations unless you have medical or other emergent reasons. You are expected to ask questions and discuss with the presenter as well as other students about the presented topic and related information.